

No. XXIX.—REPLY TO DR. MALCOLM SMITH'S REMARKS
IN THE LAST JOURNAL.

In answer to Dr. Malcolm Smith's criticism in the last Journal (p. 682) on my identification of his specimens sent from Siam, which I considered to be *Hydrophis cyanocinctus* (Daudin) (*vide* Bombay Natural History Journal Vol. XXV, p. 754), I would like to make the following reply.

My conception of *Hydrophis cyanocinctus* is based upon well over one hundred specimens collected from an extensive area, *viz.*, Persian Gulf, Coast of Sind, W. Coast of India especially Bombay and Cannanore, the Coast of Ceylon, the E. Coast of India especially Madras, Orissa, and the Sunderbunds, Chittagong, and the Coasts of Burma and Tenasserim. In addition I have examined all the sea-snakes, in the British Museum, upon which the descriptions in Boulenger's Catalogue are based. (Vol. III, 1896.) The specimens described by Dr. Malcolm Smith as *H. siamensis* (Journal Natural History Society, Siam, Vol. II, 1917, p. 341), which I consider *H. cyanocinctus* are all from a small area, *viz.*, the Coast of Siam.

The differences he claims for his *siamensis* as opposed to *cyanocinctus* (Daudin) I will deal with in detail.

For easy reference I append in column A my range of costals and ventrals for what I consider *cyanocinctus*. In column B are those given by Dr. Malcolm Smith for his *siamensis*.

| A. <i>cyanocinctus</i> . | B. <i>siamensis</i> . |
|---|-----------------------------|
| (1) Costals two heads lengths behind head 25 to 36. | (1) neck 29 to 35. |
| (2) Costals at midbody 33 to 44. | (2) maximum girth 35 to 42. |
| (3) Ventrals 280 to 397. | (3) 271 to 343. |

It will be noticed that Dr. Malcolm Smith's figures are completely contained within mine.

(2) *The frontal*. Dr. Malcolm Smith places reliance on the frontal shields, but I find that the length of the frontal, and the length of the snout vary a good deal in individuals of the same species.

(3) *Temporals*. With regard to the temporals, by Dr. Malcolm Smith's own showing, these are aberrant in 33 per cent. of his specimens! It is difficult to see therefore how he can place any reliance on these shields in establishing his *siamensis* as a species.

(4) *Dentition*. Dr. Malcolm Smith remarks that in one place I have noted the posterior maxillary teeth of *cyanocinctus* as 6 to 8, and that in his specimens from Siam I count them 8 to 9, doubtfully 10. As my skull collection enlarges I frequently have to modify previously expressed views, and a slight increase of previously reported figures is to be expected. In 10 specimens of *cyanocinctus* in the Indian Museum I found the variation 6 to 10. In at least 12 others they range again from 6 to 10.

(5) *Length*. Dr. Malcolm Smith says his Siam specimens do not exceed 1,000 mm., whereas *cyanocinctus* grows to 1885 mm., and he seems to think that the fact that seven of his specimens were gravid clinches the matter of length. However it is very well known that snakes grow considerably after attaining sexual maturity. My breeding notes on many species abundantly illustrate this. As an example let us refer to Mr. D'Abreu's note in this Journal on the breeding of *Python molurus* (Vol. XXV, p. 509). Here the lengths of the parents are noted as ♀ 8 feet 6 inches, and ♂ 5 feet 8 inches. It would not be sound to argue from this that a snake 5 feet 8 inches long, and sexually mature should be considered of a different species from one that well authenticated records show reaches over 19 feet.

(6) *Colouration*. This is so variable that it carries little if any weight in establishing many species, and I find *cyanocinctus* from Indian Coasts remarkably variable.

Dr. Malcolm Smith may be perfectly correct in his view that the species he has described as *H. siamensis* is valid, but I think it rests on a very insecure basis, and is not supported by the facts I have explained above.

F. WALL, LIEUT.-COLONEL, I.M.S.

BANGALORE, 21st July 1919.

No. XXX.—NOTES ON SOME RECENT ADDITIONS TO OUR SOCIETY'S SNAKE COLLECTION.

On my return to India this year I was shown, while passing through Bombay, a number of interesting snakes, which had been received by the Society during the last few years. These had already been identified by Mr. Prater and two were recorded by him in the previous number of the Journal, but nevertheless I have included them in these notes as I have been able to add some additional information.

TYPHLOPS JERDONI (BOULENGER) (= *TYPHLOPS DIVERSICEPS* (ANNANDALE))

A well preserved specimen of this little known, and seemingly rare snake, was presented to the Society's collection by Mr. J. M. D. Mackenzie from Pegu. As all the other known specimens are from Hills, it would be interesting to have further information concerning the exact locality in Pegu (District?). The specimen accords well with Boulenger's description (Fann. Brit. Ind. 1890, p. 238), except in the following points:—

The rostral is more than one-fourth, but less than one-third the breadth of the head at the eyes. The nasals shields just meet behind the rostral. The præocular touches the 3rd labial only. The diameter of the body is about $\frac{1}{35}$ the total length, the latter being $5\frac{1}{2}$ inches. In a later description of the snake, Boulenger modifies his original observations, in a corrigendum (Cat. Snakes, Brit. Mus. Vol. I, 1893, p. 418) showing that the præocular touches only the third labial, and it may be remarked that this is the only Indian species of the genus that shows this peculiarity.

In 1891, Sclater (List. Snakes, Ind. Mus., p. 2) reported a specimen from Buxa Doors. Among collections of snakes belonging to the Indian Museum, and submitted to me at various times by Dr. Annandale for identification, I was able to examine, and confirm the identification of Sclater's specimen. I found another labelled Lashio, N. Shan States. The examination of Annandale's type of *T. diversiceps* from Pashighat, Abor Hill (Rec. Ind. Mus. Vol. VIII, p. 44 and plate I) shows that the specimen is a very typical one of *T. jerdoni*. The scale rows reported as 18 are in reality 22. The anterior nasal touches the first and second labials, not the first only as reported. The præocular touches the 3rd labial only. The diameter of the body is about $\frac{1}{35}$ the total length. In this Journal (Vol. XIX, p. 338), I reported a specimen from the Darjeeling neighbourhood (Pashok or Tindharia) $9\frac{1}{4}$ inches long.

The habitat at present known for the species is Eastern Himalayas, Hills of Assam, Burma as far East as the N. Shan States.

COLUBER (ABLABES) PAVO (ANNANDALE).

A very nice little specimen of this rare snake described in 1912 by Dr. Annandale (Rec. Ind. Mus. 1912, Vol. VIII, p. 47, and plate) from a single specimen captured in the Abor Hills has recently enriched the Society's